

AMENDMENTS TO THE CLAIMS

Claims 1-23. (Cancelled)

24. (Currently Amended) A content distribution system comprising: a license management server, a relay server and a terminal device,
wherein the license management server includes at least one processor programmed with the following units:

a first license generation unit operable to generate, in a first format, a first license for controlling content use in the terminal device;

a modification detection information generation unit operable to generate a digital signature for detecting a modification of the first license and further operable to send the generated digital signature to the relay server, depending on a condition of a transmission path to the terminal device;

a specification information receiving unit operable to receive an input of format specification information that is an instruction, to the terminal device, for converting a format of a second license to the first format; and

a specification information sending unit operable to send the received format specification information to the relay server,

the relay server includes at least one processor programmed with the following units:

a second license generation unit operable to generate, in a second format, a second license by adding, to the first license, the digital signature for detecting a modification of the first license, the second format being different from the first format, and further operable to add, to the generated second license, the format specification information received by the license management server, and

the terminal device includes at least one processor programmed with the following units:

a format conversion unit operable to obtain the second license from the relay server and further operable to convert the format of the second license into the first format, according to the format specification information added to the second license;

a judgment unit operable to judge presence or absence of the modification of the first license using the digital signature for detecting the modification of the first license, by a

~~malicious user~~, whose format is converted from the second format into the first format by the format conversion unit ~~based on the digital signature~~; and

a use unit operable to use the content according to the first license in the case where the judgment unit judges that no modification is made.

25. (Currently Amended) The content distribution system according to claim 24, wherein, the modification detection information generation unit is further operable to determine whether a frequency band of the transmission path is narrower than a frequency band predetermined by a characteristic of the transmission path or a communication speed of the transmission path is slower than a communication speed predetermined by a characteristic of the transmission path, and

in the case where the modification detection information generation ~~device unit~~ determines that ~~a frequency~~the frequency band of the transmission path is narrower than a ~~frequency~~the frequency band predetermined by ~~a characteristic~~the characteristic of the transmission path or ~~a communication~~the communication speed of the transmission path is slower than ~~a communication~~the communication speed predetermined by ~~a characteristic~~the characteristic of the transmission path, the modification detection information generation unit ~~sends~~is operable to send the generated digital signature to the relay server and ~~instructs~~further operable to instruct the relay server to generate the second license.

26. (Currently Amended) The content distribution system according to claim 25, wherein the second license generation unit ~~generates~~is further operable to generate the second license so that a ~~whose~~data size of the second license generated in the second format is smaller than a data size of the first license generated in the first format.

27. (Currently Amended) The content distribution system according to claim 24, wherein the license management server includes a first sending unit operable to send the first license to the terminal device,
the relay server includes a second sending unit operable to send the second license to the terminal device via the transmission path different from the transmission path in the case of using the license management server, and

the terminal device ~~obtains~~ is operable to obtain the second license from the second sending unit.

28. (Currently Amended) The content distribution system according to claim 24, further comprising a plurality of servers, one of which is the relay server,

wherein each of the relay servers includes an "n"th license generation unit operable to generate an "n"th ("n" is a natural number that is 2 or greater) license, in an "n"th format, ~~generated by adding~~, to the first license, the digital signature for detecting the modification of the first license, the "n"th format different from the first format, and

the format conversion unit ~~obtains~~ is operable to obtain the "n"th license from one of the relay servers and ~~converts~~ further operable to convert the format of the "n"th license into the first format.

29. (Currently Amended) A license management server in a content distribution system comprising: the license management server; a relay server; and a terminal device,

wherein the license management server ~~distributes~~ is operable to distribute a first license for controlling content use in a terminal device,

the relay server ~~generates~~ is operable to generate, in a second format, a second license by adding, to the first license, a digital signature for detecting a modification of the first license, the second format being different from a first format, ~~adds~~ further operable to add, to the generated second license, format specification information, and ~~distributes~~ further operable to distribute the second license, and

the terminal device ~~generates~~ is operable to generate the first license by format transformation by obtaining the second license and converting the second license from the second format into the first format using the format specification information, ~~detects~~ further operable to detect presence or absence of the modification of the generated first license using the digital signature for detecting the modification of the first license, by a malicious user, based on the digital signature, and, in the case where no modification is detected, ~~uses~~ further operable to use the content according to the first license,

the license management server includes at least one processor programmed with the following units:

a first license generation unit operable to generate, in the first format, the first license;
and

a modification detection information generation unit operable to generate the digital signature of the first license, further operable to send the generated digital signature to the relay server, depending on a condition of a transmission path to the terminal device, and further operable to instruct the relay server to generate the second license;

a specification information receiving unit operable to receive an input of the format specification information that is an instruction, to the terminal device, for converting the format of the second license into the first format;

a specification information sending unit operable to send the received format specification information to the relay server.

30. (Currently Amended) The license management server according to claim 29,
wherein, the modification detection information generation unit is further operable to determine whether a frequency band of the transmission path is narrower than a frequency band predetermined by a characteristic of the transmission path or a communication speed of the transmission path is slower than a communication speed predetermined by a characteristic of the transmission path, and

in the case where the modification detection information generation ~~device unit~~ determines that ~~a frequency~~ the frequency band of the transmission path is narrower than a ~~frequency~~ the frequency band predetermined by ~~a characteristic~~ the characteristic of the transmission path or ~~a communication~~ the communication speed of the transmission path is ~~lower~~ slower than ~~a communication~~ the communication speed predetermined by ~~a characteristic~~ the characteristic of the transmission path, the modification detection information generation unit ~~sends~~ is operable to send the generated digital signature to the relay server and ~~instructs~~ further operable to instruct the relay server to generate the second license

31. (Currently Amended) The license management server according to claim 30,
wherein the relay server ~~generates~~ is further operable to generate the second license ~~whose so that a data size of the second license generated in the second format is smaller than a~~
data size of the first license generated in the first format.

32. (Currently Amended) A relay server in a content distribution system comprising: a license management server; the relay server; and a terminal device,

wherein the license management server ~~distributes~~is operable to distribute a first license for controlling content use in a terminal device,

the relay server ~~generates~~is operable to generate, in a second format, a second license generated by adding, to the first license, a digital signature for detecting a modification of the first license, the second format being different from a first format, and ~~distributes further~~operable to distribute the second license, and

the terminal device ~~generates~~is operable to generate the first license by format transformation by obtaining the second license and converting the second license from the second format into the first format using format specification information, ~~detects further~~operable to detect presence or absence of the modification of the generated first license using the digital signature for detecting the modification of the first license, by a malicious user, based on the digital signature, and, in the case where no modification is detected, ~~uses further~~operable to use the content according to the first license,

the relay server includes at least one processor programmed with the following units:

a second license generation unit operable to generate, in the second format different from the first format, the second license by adding, to the first license generated in the first format, the digital signature of the first license received from the license management server, further operable to receive an input of format specification information from the license management server, the format specification information that is an instruction, to the terminal device, for converting the format of the second license to the first format, and further operable to add the received format specification information to the generated second license; and

a second license sending unit operable to send the generated second license to the terminal device.

33. (Currently Amended) The relay server according to claim 32,

wherein the second sending unit ~~sends~~is operable to send the second license to the terminal device via a transmission path different from the license management server.

34. (Currently Amended) A terminal device in a content distribution system comprising: a license management server; a relay server; and the terminal device,

wherein the license management server ~~distributes~~ is operable to distribute a first license for controlling content use in the terminal device,

the relay server ~~generates~~ is operable to generate a second license generated, in a second format, by adding, to the first license, a digital signature for detecting a modification of the first license, the second format being different from a first format, and distributes the second license, and

the terminal device ~~uses~~ is operable to use the content according to the first license by obtaining the second license and ~~generates~~ further operable to generate the first license using format conversion,

the terminal device includes at least one processor programmed with the following units:

a format conversion unit operable to obtain the second license generated in the second format from the relay server, and further operable to convert a format of the obtained second license into the first format different from the second format so as to generate the first license according to format specification information that is an instruction to the terminal device for converting the format of the second license to the first format, and that is added to the second license;

a judging unit operable to judge presence or absence of the modification of the generated first license using the digital signature for detecting the modification of the first license, ~~by a malicious user, based on the digital signature~~ added to the second license; and

a use unit operable to use the content according to the first license in the case where the judgment unit judges that no modification is made.

35. (Currently Amended) A license distribution method for use in a content distribution system including a license management server, a relay server and a terminal device, the method comprising using at least one processor to perform the method of:

generating, in a first format, a first license for controlling content use in the terminal device, the generation being executed by the license management server;

generating a digital signature for detecting a modification of the first license and sending the generated digital signature to the relay server, depending on a condition of a transmission

path to the terminal device, the generating and sending being executed by the license management server;

receiving an input of format specification information that is an instruction, to the terminal device, for converting a format of a second license to the first format, the receiving being executed by the license management server;

sending the received format specification information to the relay server, the sending being executed by the license management server;

generating a second license in a second format different from the first format by adding, to the first license, a digital signature for detecting a modification of the first license, and adding the format specification information received by the license management server to the generated second license, the generation and adding being executed by the relay server;

converting the format of the second license into the first format by obtaining the second license from the relay server, according to the format specification information added to the second license, the conversion being executed by the terminal device;

judging presence or absence of the modification of the first license using the digital signature for detecting the modification of the first license, by a malicious user, whose format is converted from the second format into the first format ~~based on the digital signature~~, the judgment being executed by the terminal device; and

using the content according to the first license in the case where it is judged that no modification is made, the use being executed by the terminal device.